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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/721,729	07/02/2009	Kevin Giles	M-1401-02	2781

43840 7590 12/02/2016

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ART UNIT	PAPER NUMBER
2881	

NOTIFICATION DATE	DELIVERY MODE
12/02/2016	ELECTRONIC

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL
AND APPEAL BOARD

Ex parte KEVIN GILES

Appeal 2014–000484
Application 11/721,729
Technology Center 2800

Before BEVERLY A. FRANKLIN, N. WHITNEY WILSON, and CHRISTOPHER L. OGDEN, *Administrative Patent Judges*.

FRANKLIN, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant requests our review under 35 U.S.C. § 134 of the Examiner's decision rejecting claims 1, 5, 6, 12, 14, 17, 20, 22, 23, 25–29, 33–35, 43, 44, 67, 74–76, 78 and 79 set forth in the non-final Office Action mailed February 28, 2013. We have jurisdiction over the appeal under 35 U.S.C. § 6(b).

STATEMENT OF THE CASE

Claim 1 is illustrative of Appellants' subject matter on appeal and is set forth below:

1. An ion guide comprising:

a hollow, tubular or mesh electrically conducting device having a wall; one or more electrodes arranged in, along, on or substantially adjacent to a portion of said wall;

one or more apertures provided or arranged in a portion of said wall, wherein in a mode of operation ions are arranged to exit said ion guide via said one or more apertures; and

means arranged and adapted to maintain a DC potential difference between at least a portion of said wall and some or all of said one or more electrodes.

The Examiner relies on the following prior art references as evidence of unpatentability:

Kernan et al., hereinafter "Kernan"	US 2003/0178564 A1	published Sept. 25, 2003;
Vestal	US 2005/0116162 A1	published Jun. 2, 2005
Whitehouse et al., hereinafter "Whitehouse"	US 2005/0258364 A1	published Nov. 24, 2005

THE REJECTIONS

1. Claims 1, 5, 6, 12, 17, 20, 22, 23, 26, 29, 33, 34, 43, 44, 67, 74–76, 78 and 79 are rejected under 35 U.S.C. §103(a) as being unpatentable over Kernan in view of Vestal.

2. Claims 14, 25–28 and 35 are rejected under 35 U.S.C. §103(a) as being unpatentable over Kernan and Vestal in view of Whitehouse.

ANALYSIS

Claim interpretation is one important aspect in the present case. On the one hand, the Examiner interprets claim 1 as not requiring an electrically conducting device. Ans. 13. The Examiner explains that the phrase of "a hollow, tabular or mesh electrically conducting device" is ambiguous as to which component is electrically conducting. *Id.* The Examiner believes this claim language only requires the mesh to be electrically conducting. *Id.* Appellant argues that this interpretation is incorrect for the reasons stated on pages 4–7 of the Reply Brief. We agree with Appellant's stated positon in the record. We therefore interpret the claim language as requiring an electrically conducting device (whether it be a hollow electrically conducting device, a tubular electrically conducting device, or a mesh electrically conducting device).

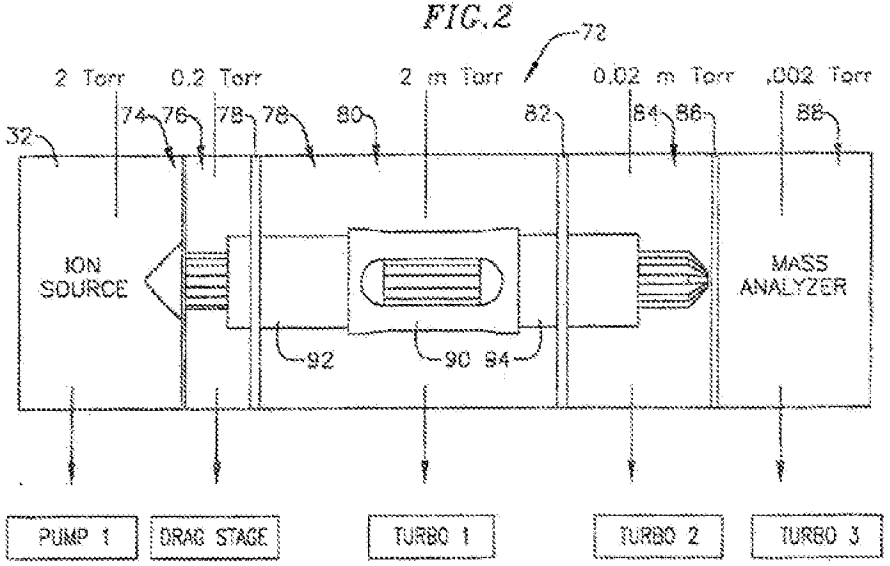
With regard to the aforementioned interpretation of claim 1, it is the Examiner's position that the primary reference of Kernan teaches an ion guide comprising a hollow, tubular or mesh electrically conducting device having a wall (the Examiner refers to Kernan's Figures 2, 8, 13, etc., sleeve 90, 146, paragraphs 0078, etc., FIG. 35 and associated text discuss that the outer hollow "wall" may likewise be an electrode). Ans. 2.

Appellant's response to the Examiner's aforementioned findings is reproduced below:

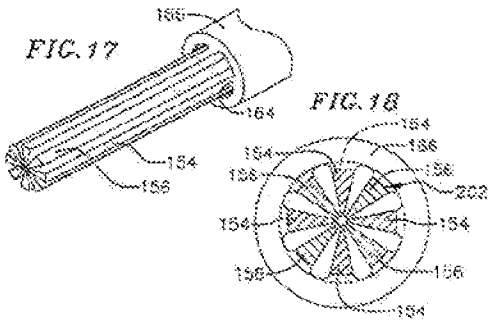
> The Examiner argues that the insulating sleeve element, 90 of Figure 2 or element 146 of Figure 13 constitutes a hollow, tubular or mesh

device having a wall with an aperture therein. See for example Figure 2 reproduced below.

FIG. 2



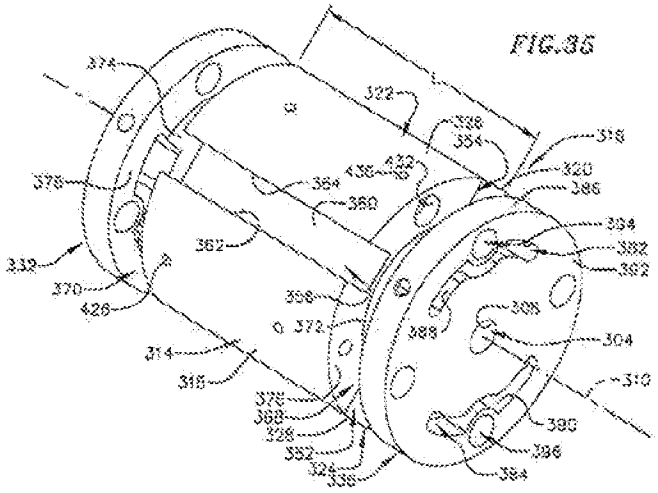
The Examiner argues that the language "one or more electrodes arranged in, along, on or adjacent to a portion of the wall" reads on electrode 154 and 156 of Figures 17 and 18, reproduced below.



However, claim 1 requires an electrically conducting device having an aperture therein and Kernan and Vestal, whether taken singly or in combination, simply do not disclose such an electrically conducting device.

Appeal Br. 12–13 (boldness omitted).

> Appellant further states:
>
> Earlier in the prosecution, in the Response to Arguments section of the Final Rejection [dated July 3, 2012], the Examiner appears to recognize the embodiments relied upon in the rejection do not disclose the invention but the Examiner does not modify the rejection. Instead the Examiner discusses a completely different embodiment shown in Figure 35 and does not explain where in Figure 35 the various elements of the claims are supposedly present. See Figure 35, reproduced below.



Appeal Br. 23–24.

Appellant argues that Figures 2, 13, 17, and 18 of Kernan do not show providing a hollow, tubular or mesh electrically conducting device having a wall, one or more electrodes arranged in, along, on or substantially adjacent to a portion of said wall and one or more apertures arranged in a portion of said wall. Appeal Br. 24. Appellant argues that Figures 31 and 35 of Kernan do not either. *Id.* Appellant states that if the Examiner considers

electrodes 278A and 278B (of Figure 31) to meet the limitation of a hollow, tubular or mesh electrically conducting device, the Examiner does not explain what structure in Figures 31 and 35 is being relied upon to meet the limitations of the claimed electrodes or how the embodiment of Figures 2, 13, 17 and 18 could be modified to have a wall and one or more electrodes arranged in, along, on or substantially adjacent to a portion of the wall.[1] *Id.*

On page 13 of the Answer, the Examiner understands Appellant's argument to be that the Examiner proposed combination of different embodiments of Kernan is deficient for lack of explanation and motivation. In reply, the Examiner states:

> [P]aragraph 0115 of Kernan discusses that "subsequent steps are then used to remove material and/or define the various elements . . . ." This implies, of course, that *all of the embodiments of Kernan are mere iterations of one another.* It should finally be noted that the independent claims have been written in such as fashion as to

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[1] We note that in the Advisory Action dated October 12, 2012, the Examiner stated:

> The Applicant[*sic* s have] argued that the examiner did not address the added limitation requiring that the hollow, tubular or mesh device is electrically conducting. However, as one can see from the Final Rejection dated 7/3/2012, this was indeed addressed. Kernan does in fact teach that the hollow, tubular device is electrically conducting. With reference to FIG. 31, paragraph 0099 of Kernan states that component 264 is a multipole. Furthermore, paragraph 0100 teaches that components 278A-B are electrodes. Electrodes are, of course, electrically conducting. In reference to FIG. 35, paragraph 0115 teaches that components 322 and 324 are electrodes. It can clearly be seen that these electrodes wrap around, forming a hollow, tubular, electrically conducting device. As such, Kernan does in fact teach this limitation, and as such, likewise renders the argument that you could not modify Kernan to include this feature, as at least FIGS. 31 and 35 illustrate this feature explicitly.

> introduce ambiguity as to exactly *which component must be electrically conducting*. As the claims are written it would be acceptable, under the doctrine of broadest reasonable interpretation, to interpret the claims as follows: a hollow [conducting or non-conducting], tubular [conducting or non-conducting] or mesh electrically conducting [conducting] device having a wall. *In other words, the claims are currently phrased* ***only require the mesh to be electrically conducting under the doctrine of broadest reasonable interpretation.*** This obviously arises from both where the comma is placed within the claim, and the alternate embodiment language as the claim is written.[2] For at least these reasons, the Examiner must respectfully disagree with the arguments such as they are presented for the independent claims.

Ans. 13.

In the Reply Brief, Appellant disputes the Examiner's aforementioned interpretation of paragraph [0115] of Kernan. Appellant argues that the sentence discussed by the Examiner is merely referring to the process of making the multipole device, and does not mean that all of the embodiments of Kernan are merely iterations of one another (as asserted by the Examiner). Reply Br. 3–4. We agree. As such, we also agree with Appellant that the Examiner's position lacks adequate reasoning, motivation, and explanation as to how the separate embodiments of Kernan are being combined to arrive at the claimed invention, for the reasons provided by Appellant in the record. *See, e.g.*, Appeal Br. 24, Reply Br. 3. This is not to say that combining two distinct embodiments in a prior art patent is inappropriate; rather, what is lacking in the record as presented by the Examiner is how the proposed modifications is implemented, how the proposed modification arrives at the claimed invention, and what is the motivation for so doing. Because of the

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[2] With regard to the Examiner's stated claim interpretation reproduced herein, we discussed, *supra*, how this interpretation is in error.

lack of detail in this regard, it goes unanswered, for example, as to whether the two disclosures of Kernan considered as a whole could or could not in practice be readily combined because, *e.g.,* of inherent incompatibility in disclosed features essential to the invention of Kernan. If the two disclosures could not in practice be readily combined, the combining of these disclosures would not be regarded as obvious. The idea that all of the embodiments are mere iterations of one another, without more, is insufficient to support the obviousness determination made by the Examiner.

In view of the above, we reverse Rejection 1. We also reverse Rejection 2 because the Examiner did not rely upon the additional reference to cure the deficiencies of the combination applied in Rejection 1.

DECISION

Each rejection is reversed.

ORDER

REVERSED